

“Plaintiff”) against United States Metals Refining Company on January 31, 2003¹, alleging violations of the Comprehensive Environmental Response, Compensation and Liability Act (hereinafter “CERCLA”), 42 U.S.C. §§ 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub.L. 99-499; and the New Jersey Spill Compensation and Control Act (hereinafter “Spill Act”), N.J. Stat. Ann. §§ 58:10-23.11 et seq.

_____ On May 17, 2004, USMR brought a counterclaim against Reichhold for contribution and a declaration of rights under CERCLA and the Spill Act and filed a third-party complaint for contribution against Port Reading-Carteret (“PRC”), Bayer Corporation (“Bayer/Lanxess”)², CP Hall Company (“CP Hall”), C.P.H. Sub. II, Inc. (“CPH II”), and Staflex Specialty Esters, Inc. (“Staflex”) (collectively, “Third Party Defendants”). By orders dated October 27, 2004 and December 7, 2004, this Court dismissed USMR’s third-party complaint against the Third Party Defendants.

After extensive discovery, both parties now move to preclude certain opinion and expert testimony. Specifically, Plaintiff moves to strike portions of the expert witness reports and testimony of Defendants’ experts John A. Rhodes, P.E. and Francis D. Hunter. Defendants move to strike the expert reports and preclude the proposed expert and opinion testimony of Robert Pearson, Richard S. Kunter, R. Scott Stoldt, and Kelly Stynes, and to strike and preclude certain

¹ The initial action only included United States Metals Refining Company, and an amended complaint filed in May 2004 (the “Complaint”) added several entities affiliated with United States Metals Refining Company, including Cyprus Amax Minerals Company (“Cyprus Amax”). United States Metals Refining Company and those entities will be collectively referred to as “USMR” or “Defendants”.

² Lanxess Corporation, as successor-in-interest to Staflex Specialty Esters, Inc., states that it was misidentified in USMR’s Third Party Complaint as “Bayer Corporation”.

portions of the expert report and proposed expert and opinion testimony of Richard P. Cawley.

II. BACKGROUND

On January 31, 2003, Plaintiff brought an action against USMR under CERCLA and the Spill Act seeking recovery for damages suffered, and response costs incurred to correct and mitigate releases or threatened releases of hazardous substances from properties in or near Carteret, New Jersey; contribution from Defendants for their share of response costs expended and that will be expended in the future at the Site; and declaratory judgment finding Defendants liable for future cleanup costs incurred at the Site.

A. The Site

USMR owned real property in Carteret, New Jersey (the “Carteret Property”), where it operated one of the world’s largest secondary copper smelters and refineries since the turn of the century (from approximately 1901 to 1983). During USMR’s ownership of the Carteret Property, slag and other metals contamination may have been deposited throughout the western portion of the Carteret Property, which was later sold to Reichhold (the “Site”). Specifically, USMR stockpiled slag and other bulk material and operated a lead refining operation on the southern portion of the Site, which may have contributed to the contamination. It was believed that there was widespread contamination at the Site consisting of lead and other metals resulting from the slag stored and disposed of at or near the Site.

Reichhold acquired the Site from USMR in 1960 and 1962. While conducting operations on the Site, including constructing and operating a chemical manufacturing facility, filling or grading activities and other activities, Reichhold may have discharged hazardous substances onto

the Site and moved existing hazardous substances on the Site to previously uncontaminated areas of the Site. During the time when Reichhold was conducting operations on the Site, USMR continued to operate its copper smelter on its portion of the Carteret Property (the “USMR property”).

In 1986 and 1987, Reichhold sold the Site in two separate transactions. In 1986, the southern portion of the Site was sold to BTL (the “BTL Parcel”) and in 1987, the remaining northern portion of the Site (the “Staflex Parcel”) was sold to Denka Chemical Corporation (“Denka”). During Denka’s ownership, hazardous substances may have been released on the Staflex Parcel and hazardous substances may have been moved to previously uncontaminated areas of the Site.

B. Remedial Action

In the mid-1980s, Reichhold began cooperating with the New Jersey Department of Environmental Protection (“NJDEP”), which was concerned that there were hazardous substances at the Site. In the 1990s, Reichhold approached USMR regarding the alleged contamination on the Site and a possible claim by Reichhold against USMR related to the contamination. Cyprus Amax entered into a Settlement Agreement and Release (the “Settlement Agreement”) with Reichhold in 1994³. The Settlement Agreement released USMR from liability in connection with environmental contamination on the Site subject to a limited exception relating to “Material New Environmental Obligations”. After entering into the Settlement Agreement, Reichhold continued communicating with NJDEP concerning potentially hazardous

³ Cyprus Amax paid Reichhold \$325,000 in settlement of certain Reichhold environmental cost recovery claims.

substances on the Site.

C. The Claims

Reichhold contends that Defendants are responsible for:

widespread contamination at the Site consisting of lead and other metals as a result of slag which defendants stored, disposed of, caused to migrate or otherwise deposited on the Site, or caused to be emitted, discharged and/or released onto the Site from their metal refining and manufacturing operations on the property contiguous to the Site.

(Complt. ¶ 22). Reichhold further claims that the parties agreed that “the Settlement Agreement, would not release Cyprus Amax from future claims which Reichhold may later assert arising from ‘Material New Environmental Obligations’ as defined by the Settlement Agreement.”

(Complt. ¶ 24). Reichhold alleges that because of the contamination caused by the Defendants, it has incurred and will continue to incur costs associated with the clean up. (Complt. ¶ 25).

In response, USMR contends that the contamination was not caused by USMR’s operations and is the result of Reichhold’s movement of fill. USMR further asserts that Reichhold has not incurred any “Material New Environmental Obligations” as that term is used in the Settlement Agreement. In support of its contentions, USMR has proffered the expert reports and testimony of John A. Rhodes and Francis D. Hunter. Reichhold has proffered the expert reports and testimony of Robert L. Pearson, Richard S. Kunter, R. Scott Stoldt, Kelly Stynes, and Richard P. Cawley.

III. DISCUSSION

A. Rule 702

The admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence, which provides: “[i]f scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of opinion or otherwise.” FED. R. EVID. 702.

In Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993), the United States Supreme Court held that the Court must exercise a gatekeeping function when determining the admissibility of proposed expert testimony under Rule 702. The objective of the gatekeeping requirement “is to ensure the reliability and relevancy of expert testimony” and “to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 152 (1999). The standards of admissibility under Rule 702 and the Court’s gatekeeping function are applicable not only to scientific expert testimony, but also to any expert testimony that is based on technical and other specialized knowledge. Id. at 141. “[T]he permissible scope of expert testimony is quite broad, and District Courts are vested broad discretion in making admissibility determinations.” Hill v. Reederei F. Laeisz G.M.B.H., Rostock, 435 F.3d 404, 423 (3d Cir. 2006).

Under Rule 702, there are two major requirements for admissibility. In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 741 (3d Cir. 1994). First, the expert must be qualified as an expert based on a broad range of specialized knowledge, skill or training. Id. While the level of expertise may affect the reliability of a particular expert, the Third Circuit Court of Appeals

generally has espoused a policy of liberal admissibility with respect to an expert's qualifications.
See id.

“The second requirement of Rule 702 is that the expert must testify to ‘scientific, technical or other specialized knowledge [that] will assist the trier of fact.’” Id. at 742 (quoting FED. R. EVID. 702). The testimony is admissible so long as the “process or technique the expert used in formulating the opinion is reliable.” Id. “[T]he expert’s opinion must be based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation’; the expert must have ‘good grounds’ for his or her belief.” Id. The factors that are important in this determination include:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique’s operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Id. However, the test of reliability is a flexible one and the list of factors “neither necessarily nor exclusively applies to all experts or in every case.” Kumho Tire, 526 U.S. at 141. “Rather, the law grants a district court the same broad latitude when it decides *how* to determine reliability as it enjoys in respect to its ultimate reliability determination.” Id. at 142 (citing General Electric Co. v. Joiner, 522 U.S. 136, 143 (1997)).

Additionally, “Rule 702 requires that the expert’s testimony must assist the trier of fact.” 35 F.3d at 742-43. The “admissibility depends in part on ‘the proffered connection between the scientific research or test result to be presented and particular disputed factual issues in the

case.” Id. at 743 (quoting U.S. v. Downing, 753 F.2d 1224, 1237 (3d Cir. 1985)). “Thus, the requirement of reliability, or ‘good grounds,’ extends to each step in an expert’s analysis all the way through the step that connects the work of the expert to the particular case.” Id.

B. The Expert Report of John A. Rhodes

John A. Rhodes (“Rhodes”), a senior vice president at the consulting firm of Haley & Aldrich, prepared a twenty-page report dated May 26, 2006 concerning the Site (the “Rhodes Report”). Rhodes’s curriculum vitae (“C.V.”) states that he has “over 28 years of experience in environmental engineering related to property, air, surface water and groundwater” and that he “is an expert in investigative and remedial engineering and management decision analysis.” (Report, Appendix A at 1).

The Rhodes Report provides Rhodes’s opinions and conclusions with regard to: (1) the background of the Site; (2) the chronology and volumes of fill at the Site; (3) the sources of contamination; (4) Reichhold’s regulatory obligations; (5) groundwater and ecologically sensitive areas; and (6) Reichhold’s claim for remediation costs. The Rhodes Report is based on various documents, including: NJDEP documents and comment letters; engineering reports and correspondence; the 1994 Settlement Agreement; aerial photographs; topographic maps; fire insurance maps; a Reichhold map; and USMR maps. (Report, Appendix B).

In its motion, Plaintiff seeks to strike portions of the Rhodes Report and prohibit Rhodes from testifying about statements set forth in the Report. Specifically, Plaintiff asserts that: (1) Rhodes’s expert opinions regarding his “cut and fill” analysis (that Reichhold excavated fill from one portion of the Site and deposited it on other portions) should be excluded because they are

speculative and hypothetical; (2) Rhodes's expert opinions regarding lead contamination should be excluded because he ignores facts undisputed by the parties; and (3) Rhodes's refusal to answer questions concerning "New Environmental Obligations" precludes his opinions from being presented at trial.

1. Rhodes's Testimony Regarding His "Cut and Fill" Analysis

Plaintiff argues that Rhodes's opinions regarding his "cut and fill" analysis should be excluded because they are speculative and hypothetical. On page five of the Rhodes Report, Rhodes states:

[a]pproximately 51,000 (net) cu yd of fill is added to the Staflex area north of the former railroad property between 1961 and 1974. The majority of the fill (28,000 cu yd) is added apparently to support the new Staflex facility. At least some of this fill in the Staflex area north of the tracks appears to have come from the railroad tracks area and the area south of the tracks including the BTL area. The net fill removal (or cut) from these southern areas is about 36,000 cu yd. This suggests that the fill placed by Reichhold on the Staflex area north of the tracks came in part from BTL and railroad areas.

(Rhodes Report 5).

Plaintiff contends that, when asked about these statements at his deposition, Rhodes conceded his statements were merely a "hypothesis" and that Rhodes could not support his statements with a reasonable degree of engineering certainty. Rhodes's deposition testimony is as follows:

Q. Can you state with reasonable engineering certainty that the 51,000 net cubic yards of fill added to the Staflex area north of the former railroad property between 1961 and 1974 is comprised of material Reichhold excavated from the BTL parcel?

- A. I think that's the same question you asked me. I said I didn't draw a conclusion that that occurred. So I would - - I have not drawn a conclusion that - - whether I could say it with reasonable engineering certainty I don't know, I have not done so.

(Rhodes Dep. 38).

Defendants contend that Rhodes's testimony as to whether Reichhold moved fill from the BTL Parcel to the Staflex Parcel is a "hypothesis" and that "Mr. Rhodes clearly testified that he did not draw a conclusion that material was moved from the BTL to the Staflex Parcel." (Defs.' Br. 21). Additionally, Defendants contend that:

[n]otwithstanding the highly suggestive correlation between the reduction in the volume of slag on the BTL Parcel and the placement of metals-containing fill on the Staflex Parcel during Reichhold's ownership, Mr. Rhodes testified that he could not conclude that this actually occurred - to a reasonable degree of scientific certainty.

Id.

Rhodes is a highly qualified expert in the field of environmental remediation. His opinion concerning the considerable extent to which fill was cut on portions of the Site and to which fill was placed on other portions of the Site was established as the basis of the methods and procedures of science, elaborately explained. All of his conclusions were introduced with the statement that "I make the following conclusions to a reasonable degree of engineering and scientific probability." A fact finder might reasonably conclude on the basis of the evidence that Reichhold removed the fill from the place where a cut was established and deposited it at the place where a fill was established. There remains the theoretical possibility that some entity other than Reichhold did all this, or that Reichhold took the cut fill elsewhere and brought in new

fill to raise the level of portions of the Site. One suspects that, recognizing these possibilities, Rhodes, on deposition, characterized as hypothesis his statement that “the 51,0000 net cubic yards of fill added to the Staflex area . . . is comprised of material Reichhold excavated from the BTL parcel.”

Despite the rather compelling deductions to be drawn from the fill data he established through acceptable scientific and technical means, Rhodes will be precluded from giving, as expert testimony, an opinion that cut fill constituted the new fill. That will be a question for the trier of fact.

2. Rhodes’s Testimony Regarding Lead Contamination

Plaintiff asserts that a lead plant that was operated by USMR on the BTL Parcel (the “Lead Plant”) contributed to the contamination of the Site. In its motion, Plaintiff contends that Rhodes’s expert opinions regarding lead contamination should be excluded because he ignores facts undisputed by the parties. Plaintiff contends that although Rhodes testified that USMR was not responsible for lead contamination at the Site, Rhodes refused to acknowledge the existence of the lead plant or how USMR operated the plant. On page 9 of the Report, Rhodes states:

There is no information indicating that a lead plant in the BTL area contributed to contamination on the Reichhold property. There is no document pointing to the use of lead in a manner that would threaten the environment or the discharge of lead into the environment from a USMR facility on the Reichhold property. The distribution of lead in soil (see Figure 7) is not consistent with lead being discharged from the lead plant.

(Rhodes Report 9). Defendants state that Rhodes’s opinion is based on the following:

most of the locations where elevated lead concentrations are present

are remote from where the former lead plant was located, and the elevated lead concentrations are located in fill added to the site by Reichhold.

(Defs.' Br. 24).

Although Defendants state that this was the basis for Rhodes's opinion, Rhodes fails to specify any basis for this conclusion in the Rhodes Report. His reference to a diagram merely depicting lead concentrations ("Figure 7") is not a sufficient basis for his conclusion. Thus, his conclusion, unsupported by any scientific analysis or factual basis, is unreliable and any testimony by Rhodes that relates to the Lead Plant's alleged contamination of the Site will be excluded.

3. Rhodes's Testimony Regarding New Obligations

_____ On pages eighteen to twenty of the Rhodes Report, Rhodes sets forth a list of fifteen conclusions based on a "reasonable degree of engineering and scientific probability." Conclusion number fifteen states, "[t]here has been no change in law or NJDEP requirements that imposed a new obligation on Reichhold subsequent to the 1994 settlement agreement."

_____ Plaintiff claims that this opinion is not explained in the body of the Rhodes Report and that in his deposition Rhodes refused to answer straightforward questions concerning Reichhold's new environmental obligations at the Site.

Defendants argue that Rhodes has offered opinions relating to the subject of new environmental obligations. Defendants state in their brief:

Mr. Rhodes opines that, because Reichhold placed fill upon much of the site, Reichhold had a pre-1994 obligation to disclose clearly the presence of that fill as an "area of concern" to the NJDEP and to

investigate that fill – including the very fill at issue in this case; that Reichhold had a pre-1994 obligation to delineate the presence of metals contamination within the fill; that the NJDEP expressly directed Reichhold to delineate slag on a site-wide basis prior to 1994 and that Reichhold failed to do so; that Reichhold had a pre-1994 obligation to record a “Deed Notice” with regard to the areas where elevated concentrations of metals would remain on site; and that no new guidelines or regulations materially altering Reichhold’s obligations have been imposed since May 1994.

(Defs.’ Br. 26).

_____As a long-time expert in environmental statutes and regulations, Rhodes is qualified to testify as to new obligations imposed by law and regulations. His very general opinion that “there has been no change in law or NJDEP requirements that imposed a new obligation on Reichhold subsequent to the 1994 settlement agreement” represents a mixture of fact and law - fact as to the effect of a particular statute or regulation, law as to whether it falls within the 1994 Settlement Agreement. The ultimate legal conclusion must be made by the court, but it would be helpful to the court in reaching that conclusion to have the opinion of an expert in the field as to how the highly technical statute and regulations and their import align themselves with the language of the 1994 Settlement Agreement.

This issue will arise again when addressing USMR’s challenge to the opinions of experts Stoldt, Stynes, and Cawley that certain regulatory requirements represented “New Environmental Obligations” as defined in the 1994 Settlement Agreement. True, those opinions were directed to specific regulatory requirements imposing new obligations and Rhodes’s opinion is a net opinion that no change in environmental law has imposed a new obligation. Rhodes, no doubt, will be asked to address specific regulatory requirements on cross-examination. In those circumstances,

Rhodes's conclusion number fifteen will be admitted.

C. The Expert Report of Francis D. Hunter

_____ Francis D. Hunter ("Hunter") is the President of Atlantis Aerial Survey Co., Inc. ("Aerial Atlantis") and has over 25 years of experience in aerial photography and photogrammetry.

Photogrammetry involves taking precise measurements from sets of stereo pairs of aerial photographs. (Hunter Cert. ¶ 4). A stereo pair of photographs is a set of two photographs in which the image captured overlaps at least fifty percent. (Id.). The two photographs are taken moments apart, from an airplane above the area to be measured, and because they are taken from different points along the flight path, each photo shows a slightly different perspective. (Id.). This difference in perspective is known as a parallax. (Id.). Parallax is the reason why people who can see from both of their eyes are able to see three-dimensionally and judge differences between objects. (Id. at ¶ 5). The lines of sight from each of the eyes to the object form an angle known as the "parallactic angle." (Id.). In photogrammetry, the same type of analysis that the brain performs is conducted deliberately and quantitatively by measuring the parallactic angles represented by the different positions of the same point in a pair of stereo photographs. (Id. at ¶ 7).

Hunter and Aerial Atlantis were hired to review historic photography of the Site and determine surface models. (Hunter Report 1). His results are based on stereo pairs of the Site from the years 1940, 1951, 1961, 1974, 1986, and 1995. (Id. at 2). Years 1986 and 1995 are at a photo scale of 1" = 800' and the year 1974 is at a photo scale of 1" = 1500'. (Id.). The years 1940

and 1951 are at a photo scale of 1" = 1667' and the year 1961 is at a photo scale of 1" = 1500'.⁴

Hunter explains in his report that the four earlier years “require extra care in the density and reading of control to maintain a level of confidence.” (Id.). Hunter concluded that “the surface DTM [Digital Terrain Modeling] data for each year has a relative accuracy of one foot plus or minus.” (Id.).

1. Industry Standards

____ Plaintiff seeks to preclude Hunter’s surface DTM data for the years 1940, 1951, 1961, and 1974. Based primarily on the Declaration of Timothy B. Pool (“Pool”), Plaintiff argues that Hunter failed to comply with accepted industry standards in determining vertical differences in ground surface. Plaintiff points to the American Society of Photogrammetry and Remote Sensing (“ASPRS”) which has established industry accepted standards for determining ground elevations from aerial mapping photography. (Pl.’s Br. 9). Pool states that pursuant to the ASPRS standards, “a ground surface may be determined within ‘+’ or ‘-’ one foot vertical accuracy when the aerial photograph is obtained from an aircraft at an altitude to produce a photography scale of 1,000 feet to 1 inch (1,000 scale) or less (meaning a larger scale, for example 600 scale).” (Pool Decl. ¶ 7). According to Pool, “[u]nder ideal conditions 1,000 scale is the maximum scale (maximum flight altitude) at which the standard recommends a ground surface DTM to be generated within +/- one foot vertical accuracy.” (Id.). As Hunter acknowledged at his deposition, as a general rule, the higher you are from the ground, the more difficult it is to

⁴These numbers for the years 1940, 1951, and 1961 reflect a correction of the errors made in the Hunter Report that were corrected through Hunter’s deposition testimony. The Hunter Report incorrectly states that the years 1940 and 1951 are at a photo scale of 1" = 1700', 1961 at a photo scale of 1" = 1600'.

determine with accuracy the elevation of objects on the ground. (Hunter Dep. 67).

Plaintiff challenges Hunter's data for the years 1940, 1951, 1961, and 1974 based on these standards. According to Pool,

[a] photogrammetrist who attempts to determine ground surface elevations of +/- one foot using photographs taken at one and a half times and greater over the recommended scale is not complying with ASPRS standards . . . [and that] [t]he use of stereo-pair photographs at scales of 1,500 scale or 1,667 scale to determine ground surface elevations within +/- one foot vertical accuracy would not pass peer review within the ASPRS.

(Pool Decl. ¶ 8).

Plaintiff also argues that in addition to failing to comply with the ASPRS standards, the Hunter Report is "wrought with inaccuracies." (Pl.'s Br. 13). In support of this argument, Plaintiff points out Hunter's mistake in reporting the scale of the 1940, 1951, and 1961 photographs and points to Hunter's deposition testimony wherein he acknowledged he wrote the report off the top of his head and without the photographs in hand. (Id.).

Defendants argue, based on Hunter's Certification, that the ASPRS standards make certain recommendations regarding the height of aerial photography and that these standards "are typically used when producing maps of current ground surfaces to plan new civil engineering projects where lower elevation photography is available or can be obtained by ordering new flights." (Defs.' Br. 19). Defendants concede that these recommendations make sense when new aerial photography can be ordered, but argue that they do "not constitute an authoritative determination that it is not technically possible to achieve the levels of accuracy that Mr. Hunter obtained in his photogrammetric analysis." (Id.). Additionally, Defendants contend that using

lower scale photography is not the only way to achieve reliable results and that Hunter achieved his purported level of vertical accuracy by taking extra care, and he verified that accuracy “by repeated and redundant measurements against the known elevations of the control points, against the flatness of the waterline of the Arthur Kill and against the DTM data they generated from more recent (and lower elevation) photographs.” (Id. at 20).

Hunter’s qualifications are not challenged. The thrust of Plaintiff’s argument is that because Hunter did not comply with the ASPRS standards/recommendations, his findings should be excluded. The court finds, however, that although ideally the height of aerial photography should have been as the ASPRS recommends, in light of the expertise of Mr. Hunter and his application of his expertise to the photographs that he used, the data will be admitted. Additionally, Plaintiff arguments as to Hunter’s mistake in reporting the scale of the 1940, 1951, and 1961 photographs is not a basis for exclusion. The weight of Hunter’s opinion may be challenged at trial by cross-examination, but his methodology is reliable and his opinion will not be excluded.

Although ideally, if possible, ASPRS standards should have been complied with with respect to the years 1940, 1957, 1961, and 1974; in fact that was not possible, because photography taken at the recommended altitude were not available. In these circumstances, the evidence establishes that reliable degree accuracy can be obtained by using the photographs, along with other means accepted in the field, to check the accuracy of the ultimate conclusions. In the present case, for example, by checking and confirming that, as measured in Atlantis Aerial’s stereo restitution instrument, there was no difference in the elevation at any point along the waterline of the Arthur Kill, they obtained verification of the vertical orientation of their

stereo models for each pair of aerial photographs. Hunter and Atlantis Aerial checked the programmatically measured coordinates of the certain points or features of the Site that did not change (roads, railroad tracks, buildings) against the coordinates for the same points programmatically measured based on earlier or later pairs of aerial photos. Consistency with the elevations measured in the other time periods confirmed the integrity of the vertical date.

It would, of course, have been preferable to have been able to use photographs taken at ASPRS's recommended height for all the years in question, but the evidence establishes that by taking additional confirmatory steps, reasonable accuracy can be established. As Hunter summarized it:

By taking more measurements than we would have used with current aerial photography, by using more controls and pass points than we would have used with current aerial photography, by performing redundant checks to confirm the consistency of our measurements, by scrupulously checking and refining the orientation of our stereo models we established, Atlantis Aerial obtained highly accurate measurements from older aerial photography and, even more importantly, empirically verified that we had achieved this level of accuracy.

(Hunter Cert. ¶ 27).

2. Camera Calibration

_____Plaintiff also seeks to preclude Hunter's data based on his failure to take into account camera calibration data. Plaintiff contends that because camera equipment was much less technically advanced 30+ years ago, the clarity of images taken between 1940 and 1974 were not as sharp and, as a result, the generated ground elevations are not as accurate. (Pl.'s Br. 14). Plaintiff argues that Hunter's failure to use camera calibration compounded his failure to adhere

to the ASPRS standard and makes his results even further suspect. (Id. at 15).

Defendants argue that contrary to Plaintiff's argument, the "lack of camera calibration data for the older photographs had no negative impact on the DTM data because the instruments and methods used by Atlantis Aerial did not require these particular data to produce reliable results." (Defs.' Br. 25). Defendants also argue that historical photographs are commonly used by the USEPA and that they are reliable.

The court finds Plaintiff's arguments unpersuasive. Although the quality of the images taken thirty years ago were not of the same quality as the images that can be taken today, the techniques employed by Hunter in his analysis satisfy the admissibility requirements of Rule 702. Therefore, Hunter's opinion will not be excluded.

D. The Expert Report of Robert Pearson

____ Dr. Robert Pearson ("Pearson") is a vice president of CH2M HILL with an emphasis in the energy and industrial systems environmental practice area. Pearson's resume, which is attached to his expert report (the "Pearson Report"), states that he has "over 36 years of experience in environmental and technical engineering, regulatory review and assessment, preparation of industrial compliance policy, and environmental consulting." (Pearson Report 18). He was hired by Reichhold to evaluate the possibility "that air borne emissions from the smelter and fugitive dust carrying metals drifted over and deposited on adjoining property . . ." (Id. at 2). Specifically, Pearson has provided opinions concerning airborne movement of particles from: (1) slag stockpiled on USMR property; (2) slag stockpiled on the BTL Parcel; and (3) USMR's smelter operations.

In support of his findings, Pearson relies on several documents that were provided to Reichhold by USMR. These documents include: a 1984 report by Richard Dunk (the “Dunk Report”), a 1961 report by Herbert H. Kellogg (the “Kellogg Report”), the transcripts of the depositions of Dunk, Donovan, Filiaci, and Migliorini, a Federal Register notice, and aerial photographs and site layout drawings of the USMR property.

Defendants offer numerous contentions in support their motion to strike the Pearson Report and preclude Pearson’s expert and opinion testimony. First, they contend that Pearson is not an expert in the investigation or remediation of hazardous substances in soil or groundwater. Thus, Defendants argue that Pearson’s opinion on the role of the Lead Plant on the presence of lead on the BTL Parcel is beyond his area of expertise, as it was based on a map depicting groundwater samples and the fact that a “hot spot” was in the same location as the Lead Plant.

Plaintiff argues that Defendants confuse Pearson’s scope of work, which was to offer opinions on “air issues.” They claim that “[b]ased upon his scientific and technical knowledge, education and professional experience, Dr. Pearson is eminently qualified to offer opinions based, in whole or in part, on an examination of hazardous substances in soil and groundwater.” (Pl.’s Br. 14). Plaintiff contends that although Pearson testified that he has experience in groundwater, he was not claiming to be a groundwater expert in this case because he testified that “others are doing that.” (*Id.*). Plaintiff argues that Pearson is qualified to draw inferences from soil and groundwater data in support of his opinions concerning the airborne dispersion of metals, and that his opinion concerning the “hot spot” is properly based upon a review of CH2M Hill maps and his knowledge concerning the location of the Lead Plant.

_____ In the Pearson Report, Pearson states as follows:

The CH2M HILL (2006) maps indicate that there are elevated quantities of several metals that have been detected on the Reichhold property, including arsenic, cadmium, copper, nickel, zinc, selenium, and lead. The distribution of lead on the Reichhold property is particularly interesting since the data show a local hot spot of lead concentration on the Reichhold property. This hot spot location is in the same location as the location of a former lead plant shown on a USMR drawing (USMR, 1953). This pattern of a hot spot can not be explained by wind deposition since the hot spot is constrained to a small area. The lead contamination in this small area is likely due to residual contamination from the former lead plant that was located in this area as shown in the USMR drawing (USMR 1953).

(Pearson Report 13).

Pearson is qualified to give an expert opinion concerning soil and groundwater issues generally and to the effect that the “hot spot” cannot be explained by wind deposition. His opinion as to the actual cause of the lead contamination is within the area of his expertise and is admissible. In his report, Pearson opines that the “hot spot” of lead contamination is from the Lead Plant because it could not have been caused by wind deposition and because the Lead Plant was located in that area.

Second, Defendants argue that Pearson’s opinions concerning the windborne movement of particles is inadmissible because he applied no methodology to reach his conclusion that the particles were actually deposited on the Site and made no effort to quantify the amount of particles that reached the Site. Defendants contend that Pearson testified that such a quantification would not be possible. They quote a portion of Pearson’s deposition testimony wherein he was asked and answered as follows:

Q Do you believe you can determine with reasonable scientific certainty the amount of fugitive dust and emissions containing metals from the USMR plant that was deposited on the Reichhold property?

A Given the limited information we have right now, the answer is no. We sought that information from USMR and did not receive it.

(Pearson Dep. 112).

Additionally, Defendants argue that although Pearson relies on the Dunk Report: (1) the Dunk Report did not conclude lead was deposited on any property; and (2) Pearson did not attempt to calculate any deposition on the Site based on the Dunk Report and that it was not possible to do so.

Plaintiff argues that none of the Daubert criteria require that Pearson offer an opinion concerning the proportion of metals attributable to USMR. Plaintiff further contends that it is often the case in environmental litigation involving decades of disposal that precise calculations may not be possible and that here, the alleged dispersion took place over an 80 year period. Plaintiff claims that 100 percent of the metals on the Site came from USMR's operations because neither Reichhold or its neighbors generated any metal wastes and where USMR operated a copper smelter and refinery on its property and a lead smelter on the Site.

Additionally, Plaintiff argues that USMR has a "well-documented history of egregious air pollution." (Pl.'s Br. 16). Plaintiff contends: (1) there was an EPA Federal Register Notice in 1984 that stated that New Jersey's State Implementation Plan for compliance with air quality standards for lead could not be approved because of excessive lead emissions from USMR; (2) during the late 1970's and 1980's, the NJDEP reported on many occasions that stack emissions

from USMR created conditions of “one hundred percent opacity”; and (3) in 1986, the State of New York successfully sued USMR to cease discharging metals from its industrial stacks. (Id.).

The Pearson Report does not purport to quantify the amount of particles that reached the Site and states in pertinent part as follows:

Data with which to calculate the deposition rates of airborne dust was requested but not received from USMR. In the absence of these data, we can make qualitative estimates of the amount of fugitive dust transported by the wind from the USMR smelter property onto the Reichhold property with a reasonable degree of scientific certainty. Table 1 is a grain size analysis of the slag material deposited on the USMR property. This data demonstrates that about half of the slag is comprised of very small particles (more than half by weight with diameter less than 1 millimeter) that were easily picked up by the wind through scouring action and blown by the wind. From the wind rose (Figure 2), 14% of the time this resulted in wind transport if this half of the slag that is fine dust to the Reichhold property.

(Pearson Report 9).

In his report, Pearson analyzes wind patterns, previous reports concerning emissions from USMR, and reports from the EPA and NJDEP. Although Pearson admits that he can make only qualitative estimates of the amount of airborne particles deposited onto the Site, his testimony in this regard is reliable and will not be excluded.

Third, Defendants argue that Pearson acknowledges that it was impossible to say whether aerial deposition alone would have resulted in concentrations of metals on the Site requiring remediation. Furthermore, Defendants argue that although Pearson stated that there would be a uniform distribution of particles across the Site, he did not examine any soil sampling data.

Plaintiff argues that Pearson’s opinion concerning whether the aerial deposition created a

uniform distribution is not undermined because Pearson did not rely upon Reichhold's soil data. (Pl.'s Br. 17-18). Additionally, Plaintiff contends that the operation of *both* the Lead Plant and copper smelter generated significant fugitive and stack emissions and enormous quantities of waste slag which were dispersed across the Site and that the deposition of slag waste and aerial emissions from the Lead Plant would have obscured any pattern of airborne deposition from the adjacent USMR property. Also, Plaintiff contends that because: (1) during the 80 years of aerial deposition, the surface soils over parts of the Site were disturbed by industrial activities; and (2) the soil samples were not from the ground surface, but from some depth, an examination of the soil data would not likely resolve any question of uniform distribution. (Pl.'s Br.18). Finally, Plaintiff argues that because Defendants' expert, Kirk Wings ("Winges"): (1) did not review the cut-and-fill analysis by Rhodes; and (2) did not review certain documents, Pearson's opinions should not be subject to preclusion at trial because he did not rely on soil sampling data.

As noted below, the fact that Pearson did not rely on soil sampling data does not automatically result in the exclusion of his expert report. Pearson relies on numerous sources in formulating his opinion as to the dispersion of particles on the Site. The weight of this opinion may be challenged at trial, but it is reliable and will not be excluded.

Fourth, Defendants find most disturbing the fact that Pearson failed to examine the soil sampling data to determine whether the pattern of contamination is consistent with his hypothesis and that he rested his opinion on mere speculation. (Defs.' Br. 14). Defendants contend that despite the availability of soil sampling data, "its proposed expert on the alleged aerial deposition of metal-containing particulates upon the soil surface never looked at the sampling data showing the actual concentrations of metals in surficial soils . . ." (Id. at 15).

Plaintiff argues that Defendants have offered no technical or legal support for the proposition that, under Daubert, a consultant's supposed failure to consider some pieces of evidence as opposed to others warrants exclusion of that expert's opinion. (Pl.'s Br. 16).

Plaintiff contends that "[w]here dueling experts rely upon different sources of reliable data, the issue is not one of admissibility, but rather what credibility and weight the trier of fact should give to the evidence presented." (Id.) (citing Kannankeril v. Terminix Int'l, Inc., 128 F.3d 802, 809 (3d Cir. 1997)). Plaintiff contends that the proper inquiry is whether the expert relied on the type of data generally relied upon by experts in the same field and that if Defendants believe Pearson's opinions are subject to impeachment because he did not consider soil data, then that is an issue for cross-examination at trial. (Pl.'s Br. 17).

In Kannankeril, homeowners sued an exterminator seeking damages for injuries allegedly caused by pesticides. The district court excluded the doctor's expert testimony after it found that the doctor did not know the levels of poison at the plaintiff's home at the time of the exposure and did not know the amount of time the plaintiffs spent in the home. The Court of Appeals found that the district court erred when it ruled that an expert may rely only on an ambient air test to determine whether plaintiff had been exposed to the poison and that the court failed to recognize that the doctor had sufficient knowledge of exposure from his review of Terminix's application records which documented when, how much, and where pesticides were applied. The Court held that "[t]he issue whether an ambient air test should be given more weight than pesticide application records goes to the weight rather than the admissibility of evidence." Id. at 809. The Court noted that "[t]he trial judge must be careful not to mistake credibility questions for admissibility questions." Id.

Here, Pearson relies on several documents and reports in order to come to his conclusion regarding the deposition of particles on the Site. Although he did not rely on the soil sampling data in his report, his opinion is nonetheless admissible. Any question as to the weight that his opinion should be given will be resolved at trial.

E. The Expert Report of Richard S. Kunter

_____ In his report (the “Kunter Report”), Richard S. Kunter (“Kunter”) states that he has been a Consulting Metallurgical Engineer since 1991, with an emphasis on metallurgical process development, metallurgical plant operation, and environmental remediation of metal contaminated sites. (Kunter Report 2). Among other qualifications, Kunter states that he: (1) has 37 years of experience working on mineral process plants in operations and process development for mineral properties; (2) was the project manager for several environmental remediation effort contracts for the Bureau of Land Management, the Department of Defense, the Department of Energy, the Army at Fort Polk, and the Corps of Engineers; (3) has performed several international and national due diligence audits of mining and processing facilities; (4) has completed two process studies for the United States Trade Development Agency; (5) was retained as a metallurgical expert for the United States Department of Justice (DOJ) on behalf of the EPA; and (6) was retained in 2003 by the DOJ as a metallurgical expert in a case involving toxic metal contribution of a copper smelter in an industrial area. (Id. at 2-3). Kunter has two college degrees: a degree in Metallurgical Engineering from the University of Idaho; and a Master of Science Degree in Metallurgical Engineering. (Id. at 2). Kunter is also a member of several mining and metallurgical organizations. (Id. at 2-3).

Kunter was hired by Reichhold to “evaluate the historical operation of the former United States Metals Refining (USMR) smelter at Carteret New Jersey.” (Id. at 2). Kunter states that he “was asked to consider the general operations of both the former Carteret smelter . . . and the ‘Lead Plant’ located on the BTL portion of the Reichhold property and discuss how these operations could have contributed to the metals contamination found in the soil and groundwater at the Reichhold site.” (Id.). He states that his evaluation is based on: (1) his reading of documents and drawings provided to Reichhold by USMR; (2) his reading of transcripts of depositions of various former employees of USMR and their contractors; and (3) his knowledge of general smelter operations. (Id.).

Defendants’ first argument is that, like Pearson, Kunter is not an expert in the investigation of hazardous substances present in soil and groundwater and that Kunter is also not an expert in the movement of particulates in the atmosphere. (Defs.’ Br. 18). Defendants claim that Kunter “went far beyond his area of expertise to opine upon the transport of emissions from USMR through the atmosphere and their impact upon the Reichhold site.” (Id.). Defendants cite a portion of Kunter’s report which states:

The emissions of dust from the Carteret Smelter over the eighty plus years that it operated for many years with little or inadequate abatement equipment resulted in large quantities of metal laden fugitive dust and stack emissions on both the smelter property and that of adjoining land owners including that land once owned by Reichhold.

(Kunter Report 11). Defendants contend that Kunter bases this opinion primarily on his examination of drawings prepared by USMR’s environmental consultant, HydroQual, of metals concentrations in the soil of the adjacent USMR site and not the former Reichhold Site.

Defendants argue that although the drawings only show elevated concentrations of lead and zinc up to the property boundary between the USMR property and the BTL Parcel, Kunter opined that “these high metal loadings in the soil did not stop at the property boundary.” (Kunter Report 10-11). Defendants also point to his deposition testimony wherein he was asked and answered as follows:

Q But you don’t have any confirming data to show that latter proposition?

MR. RUSKIN: Well, you said absolutely confirming data.

A I said with a reasonable certainty I think the signature in terms of geochemical signature, the contamination of the soils, certainly does not stop at the boundary site, and it is absolutely to the boundary site with absolute confirming data, absolutely provided by USMR.

However, they did not carry that soil study from the boundary site onto the Reichhold property. Can I tell you that I absolutely believe with reasonable scientific certainty that high concentrations of lead and zinc did not stop at the boundary line just because someone did not sample the other side of the fence? Do I have absolute confirming data of that? No. Do I believe that those concentrations is zero on one side and a high number on the other side? No. I believe it continued across there. So that’s, I guess, an example.

(Kunter Dep. 82-83). Defendants also point to additional testimony which they claim indicate that Kunter did not examine the Reichhold soil sampling data:

Q Do you know if Reichhold possesses data concerning metals in the soils on the Reichhold property?

A I have not seen such data, nor did I rely on that data. They undoubtedly have some or they may have some data. I just – I am not aware of what data is available from that.

Q Did you analyze whether the concentrations of the metals in the soils or the slag on the USMR site matched the concentrations of the metals in the soils and slag on the

Reichhold property?

A Did I personally analyze these? I personally analyzed neither.

(Kunter Dep. 184-85). Defendants contend that “his methodology was so spectacularly shoddy that it led him to offer an opinion on the cause of elevated concentrations of lead in the soil of the Reichhold site without ever examining the available sampling data to first ascertain whether or not those concentrations existed.” (Defs.’ Br. 20-21).

Additionally, Defendants claim that, like Pearson, Kunter offered baseless opinions concerning a lead “hot spot” in the vicinity of the Lead Plant where he has not reviewed any soil samples from the area. Defendants again point to Kunter’s deposition testimony:

Q Had you considered the lead hot spots on the Reichhold property in or around the former lead plant to be attributable to spillages at the particular location?

A I would say that that’s – I would say is particularly probable, because you have a building that’s got the ground covered with concrete. So it’s a little hard to suggest the fugitive dust went through the roof, into the concrete, and landed in ground. The most probable cause of lead under that building are operations that probably were conducted in that building.

(Kunter Dep. 237-38). Finally, Defendants argue that Kunter “employed no reliable methodology to rule out other potential sources of metals contamination in the Reichhold property.” (Defs.’ Br. 21).

Plaintiff, in opposition to Defendants’ motion to exclude the report and opinions of Mr. Kunter, contends that Kunter has extensive experience in this area to offer an opinion concerning the source of metals on the USMR property. Plaintiff argues that the qualification of an expert is a liberal one and that Kunter has extensive experience determining the source of slag and metals

relating to contamination of both soil and groundwater. (Pl.'s Br. 26). Plaintiff explains that Kunter has worked at about 20 sites in which he was asked to either determine the source of slag or metals relating to contamination of soil and groundwater. (Id. at 27). Additionally, Plaintiff claims that Kunter has examined the leaching of slag into groundwater and has examined the deposition of wind-blown slag and situations where the means of transmission was not known. (Id.).

Plaintiff contends that based on Kunter's experience in working at metals production facilities and smelters, Kunter found that:

[a]reas where these operations were conducted have become local hot spot areas for specific element heavy metal contamination of soils. These concentrations were likely primarily caused or certainly contributed to by solutions containing heavy metals from the processes not sufficiently contained and returned to the process streams. Very wide spread soil contamination by particularly zinc and lead showing very broad contamination contours, which occurs over the total site, is primarily from emissions and fugitive dust. There are local hot spots for these metals also which correlate with process areas to recover these metals: a zinc fuming operation to recover zinc from slag, lead-tin solders recovery and productions areas, and a lead battery recovery plant where batteries were crushed and the metal plates recovered.

(Kunter Report 4). Plaintiff argues that:

[b]ased upon the foregoing, it is a reasonable and appropriate inference for Mr. Kunter to offer the following opinions: (1) metals on the USMR property were primarily from emissions and fugitive dust; (2) concentrations of metals similar to those on the USMRC property would be found on the immediately adjacent areas of the former Reichhold property; and (3) that a "hotspot" of lead contamination on the Site was caused by the operation of USMR's former lead plant at the same location.

(Pl.'s Br. 31).

Plaintiff argues that despite Defendants' contention that Kunter's opinions are outside his area of expertise, it is clear from Kunter's credentials that "he is well-qualified to discuss metals contamination resulting from the decades long operation of metal refining and smelter operations in the immediate vicinity." (Pl.'s Br. 32). As to the failure to review the soil data, Plaintiff argues that "[i]f the defendants believe that Mr. Kunter's opinions are subject to impeachment because he did not consider certain soil data, than that is an issue for cross-examination at trial." (Pl.'s Br. 32-33). Plaintiff contends that the thrust of Defendants' objection is premised on Rhodes's interpretation of sampling data reflecting lead concentrations on the Site. Plaintiff argues that because its position is that the Rhodes Report is "riddled with errors" and "grossly understates the sampling of soil conducted on the former Reichhold property," it would be inappropriate for the court to rely on Defendants' arguments, which are premised on the assumption that Rhodes's findings are complete and accurate. (Pl.'s Br. 33).

It is clear from Kunter's background that he has vast knowledge and experience in the area of metals and contamination and is qualified to provide an expert opinion with regard to USMR's operations and whether they contributed to the metals contamination of the Site. Although level of expertise may affect the reliability of Kunter's opinion, it is nonetheless admissible.

Kunter's opinion that the "high metal loadings in the soil did not stop at the property boundary" (Kunter Report 10-11), is clearly within his area of expertise. Kunter's opinion that concentrations of metals similar to those on the USMR property would be found on the

immediately adjacent areas of the former Reichhold property will not be excluded.

Kunter's opinion as to the lead "hot spot" is similarly admissible. His testimony reveals that although Kunter did not review any soil sampling data, his opinion is based on his reasoning that because the building had a roof that would have prevented fugitive dust from entering the structure, "[t]he most probable cause of lead under that building are operations that probably were conducted in that building." (Kunter Dep. 238). This unremarkable opinion is also based on years of experience in the field and will not be excluded.

F. The Expert Report of R. Scott Stoldt

_____ R. Scott Stoldt ("Stoldt") states in his report (the "Stoldt Report") that he is certified as a Certified Professional Geologist (American Institute of Professional Geologists), a Professional Geologist (State of Alaska), and a Certified Subsurface Evaluator (State of New Jersey). He received his Bachelors Degree in Chemistry and Geology from Case Western Reserve University and his Masters Degree in Hydrogeology from Wright State University. (Id.). Stoldt states that he worked at the Site for over eleven years, working ten years at O'Brien & Gere and one year at CH2M HILL. (Id.). He states that he initially worked as a geologist and was responsible for soil and groundwater sample collection and reporting, and ultimately became the Project Manager while at O'Brien & Gere and at CH2M HILL. (Id.).

Stoldt states that his opinions "relate to issues concerning the remedial actions and investigations performed by Reichhold, Inc. at the Carteret, New Jersey site . . . [and] relate to the hydrology and geology at the site and Reichhold's work in complying with the ECRA/ISRA regulations." (Stoldt Report 1). He states that his opinions also "deal with the costs incurred by

Reichhold due to USMR's operations on and/or adjacent to the Carteret site, including future costs." (Id.). In preparing his report, Stoldt relied on various documents, including: (1) USRMC documents, including plant maps and air quality assessments; (2) EPA documents; (3) various NJDEP documents; (4) aerial photographs; (5) fire insurance maps; (6) topographic maps; (7) O'Brien & Gere Engineers, Inc. documents; (8) HydroQual, Inc. documents; (9) Environmental Resources Management Documents; and (10) CH2M HILL documents.

First, Defendants argue that Stoldt's opinion as to Reichhold's role in the metals contamination at the Site is irrelevant and is not an expert opinion based on scientific methodology. His finding states:

Reichhold's operations at the Carteret site pertained to the synthesis or processing of organic materials. Almost no metals were either used during Reichhold processes or were produced as a result of said operations. There is no evidence of metals contamination on the site as a result of Reichhold's former operations.

Defendants argue that this opinion is irrelevant because all that it does is opine that Reichhold did not use metal compounds (except zinc) in its operations on the property. (Defs.' Br. 23). Defendant's claim that because they have presented evidence that Reichhold placed fill material containing elevated levels of metals on the Site, Stoldt's opinion regarding the raw materials used by Reichhold is irrelevant. (Id.). Additionally, Defendants contend that Stoldt's opinion in this regard is not an expert opinion because Stoldt read the site histories prepared by other environmental consultants and found no mention of Reichhold's use of metals (except zinc) as a raw material. (Id.). Thus, Defendants argue that the "opinion is not an exercise of Mr. Stoldt's expertise in the science of environmental site investigation, but solely a test of his

reading comprehension.” (Id.).

Plaintiff argues that Stoldt’s deposition testimony indicates that he has a strong factual basis for his opinion that the metals contamination is not due to Reichhold’s operations. (Pl.s’ Br. 39). Plaintiff contends Stoldt relied on the following in reaching his opinion: (1) documents submitted by Reichhold to the NJDEP; (2) a review of the raw materials used and end products produced by Reichhold; and (3) the work performed by consultants of other parties including Geraghty & Miller, Woodward Clyde, and HydroQual. (Id. at 38-39). Plaintiff argues that it is “perfectly acceptable” for an expert to rely upon documents prepared by others and that Defendants offer no support for their argument that Stoldt’s opinion should be excluded as “unreliable speculation.” (Id. at 39).

The court finds that Stoldt’s opinion concerning Reichhold’s use of organic materials and/or metals in its operations is relevant and would be helpful to the trier of fact because, if believed, it removes Reichhold’s operations as a source of metals contamination. Under USMR’s “cut and fill” theory, Reichhold allegedly moved fill material from the BTL Parcel to the Staflex Parcel. This may undercut the significance of Stoldt’s opinion that Reichhold itself introduced no new metals to the Site, but it does not render the opinion irrelevant.

Second, Defendants attack Stoldt’s opinion regarding the Lead Plant on the BTL Parcel. Stoldt states in his report that “USMR conducted smelting activities and disposed of or released metal waste on the Reichhold property as part of it’s [sic] prior ownership of the Carteret site.” (Stoldt Report 1). Defendants point to Stoldt’s deposition testimony which states:

Q What evidence do you have that USMR disposed of or released lead contaminants as part of the operations of the

lead plant?

A The slag material that is located adjacent to the lead plant as well as the battery casings just to the north of the lead plant that was encountered during excavation.

Q Anything else aside from those?

A Going back to my opinion that Reichhold only used organic materials with only the minor zinc additive

Q What documents, in your view, show that USMR actually did dispose of lead in the soils on the site? That is the Reichhold site.

MR. RUSKIN: From any source or just the lead plant?

MR. SCHOLZ: Focus on the lead plant.

A I can't be certain where the slag originated from, slag on the BTL portion, whether it is from the lead plant or other operating plants adjacent to the now Reichhold site.

Q What about the battery casings? What leads you to believe that they came from the lead plant? Do you have any documents that show that?

A There was a reference on a figure to a battery breaking – breaker house on the site – on the U.S. Metals site.

Q So the battery breaker reference was not on the Reichhold site, it was on the other site, the USMR site.

A That's right.

(Stoldt Dep. 60-61). Defendants contend that “Mr. Stoldt’s attribution of lead contamination on the Reichhold site, in general, to the operation of USMR’s lead plant based solely on the presence of buried battery casings in one location on the site is not a scientific opinion.” (Defs.’ Br. 24). Defendants add that “[b]y not defining the geographic limits of his opinion to that which his factual basis might apply, Mr. Stoldt showed that his methodology is unscientific and unsound.” (Id. at 25).

The court finds that Stoldt's opinion concerning the Lead Plant should be excluded.⁵

Initially, Stoldt states that his opinion is based on slag material located adjacent to the Lead Plant and battery casings located to the north of the Lead Plant. He then states that he can't be certain where the slag originated from and that his theory about the battery casings stemmed from a reference that a battery breaker house existed not on the Site, but on the USMR property. As it is apparent that Stoldt's methodology is flawed, his opinion in this regard will be excluded.

Third, Defendants attempt to exclude Stoldt's opinion that, "Slag and/or slag contaminated fill were disposed of or placed on site by USMR." (Stoldt Report 1). Defendants argue that although they do not dispute that they placed some slag on the BTL Parcel, Stoldt does not specify whether USMR placed slag in any of the locations where Reichhold claims to have incurred increased costs, specifically, the Staflex Parcel. Defendants argue that Stoldt disclaimed looking at the operational history of the Staflex Parcel in terms of the fill being placed. In support of this argument, Defendants point to a small portion of Stoldt's testimony. A larger portion of Stoldt's testimony on this subject is as follows:

Q What was the basis for that belief that it was – that the metals-contaminated soil was used as fill on the Staflex site?

A I am not sure if it was just the Staflex portion. It was holistically the site that was trying to be argued.

A I believe it was based on the fact, only for the Staflex side, that the amount of slag material on the site looked as though it would have been transported there, not by natural mechanisms; would have been disposed of there or moved there.

Q Just based on the fields themselves of slag?

⁵Plaintiff does not address this issue in its brief.

A On the fields themselves and the thickness, at least in the one field.

Q So the opinion was based more on your visual observation of the nature of the slag fields as opposed to having done a formal study of historical filling practices on the Staflex site?

A Yes.

Q Did O'Brien & Gere at that time do some type of analysis of the historical filling activity on the Staflex site?

A I don't recall that they looked at the operational history in terms of fill being placed. They did the comparison to the New Jersey background historical fill numbers.

(Stoldt Dep. 73-75).

Stoldt's opinion concerning the slag material on the Staflex Parcel was based on his visual observations. The fact that O'Brien & Gere did not, at the time in question, do some type of historical fill analysis, does not make Stoldt's testimony inadmissible. Stoldt's testimony on this subject will therefore not be excluded.

Fourth, Defendants argue that Stoldt provides no information whatsoever in his report regarding the basis for his opinion concerning USMR's causal role in the chlorinated solvents in groundwater that Reichhold has incurred costs to investigate and remediate. In his report, he states:

During the course of litigation, Reichhold discovered that groundwater containing chlorinated solvents was migrating from AMAX property onto the Reichhold site. The NJDEP has ordered Reichhold to address this contamination under the ISRA cleanup. Reichhold has incurred approximately \$200,000 in response costs related to chlorinated solvents in groundwater caused by AMAX's former operations.

(Stoldt Report 3). Defendants refer to Stoldt's deposition testimony where he is asked and

answers:

Q What leads you to believe USMR is responsible for the chlorinated solvents in the groundwater?

A There are concentrations at the property border at a well, it was for tetrachlor and trichlor, of several thousand parts per billion versus cleanups of one part per billion. What we are seeing on our property is, you know, the tens – ten part per billion level, so it certainly appears there may be an upgradient source.

Q Do you have any evidence that it was USMR that caused these chlorinated solvents to be in the groundwater?

A Only that it was detected in their wells under their sampling program.

(Stoldt Dep. 135). Defendants maintain Stoldt's opinion should be excluded because he: (1) does not present evidence of the direction of the groundwater flow; (2) does not present evidence of migration; and (3) does not discuss Reichhold's use of chlorinated solvents and attempts to locate and eliminate on-site sources of chlorinated solvents. (Defs.' Br. 27).

Plaintiff argues that Stoldt bases his opinion on: (1) higher concentrations of chlorinated solvents on USMR's property than Reichhold's; (2) evidence of chlorinated solvents in USMR's wells; and (3) evidence that USMR's property is upgradient from the Site. (Pl.'s Br. 41).

Plaintiff contends that Stoldt's opinion "is based upon the type of environmental evidence generally relied upon by experts in this field." (Id.).

Stoldt explains in his deposition testimony that the only evidence he has that USMR caused the solvents to be in the groundwater is that the solvents were detected in their wells. As to the source of the solvents on the Site, Stoldt states that "it appears there may be an upgradient source." In light of this testimony, it is clear that Stoldt's methodology is unreliable, and

therefore, this portion of the report will be excluded.

Fifth, Defendants seek to preclude the following opinion from the Stoldt Report:

In general, the presence of metals contamination due to USMR's operations and disposal practices has added costs to Reichhold's cleanup of the Carteret site by . . . 3) increased costs to evaluate their ecological impacts to the site and surrounding environment . . .

(Stoldt Report 2). Defendants contend that Stoldt does not provide any basis for his opinion, as he does not explain: (1) where the metals contamination that Reichhold was required to evaluate is located; (2) what ecological evaluation Reichhold was required to perform; (3) why he attributes these metals to USMR's operations; or (4) the evidence upon which he bases his opinion. (Defs.' Br. 27). Defendants argue that as a result, there is no opportunity to evaluate whether his methodology is scientific and reliable. (Id.).

In reviewing the Stoldt Report, there is nothing that indicates where Stoldt obtained his data regarding increased costs associated with an evaluation of ecological impacts to the Site and the surrounding environment.⁶ Although Stoldt lists a CH2M HILL document dated June 2005 and entitled "Revised Baseline Ecological Evaluation – BTL Parcel" as a document he reviewed in compiling his report, this document has not been presented to the court. Therefore, because there is no factual basis for this opinion, it will be excluded.

Sixth, Defendants seek to preclude Stoldt's expert opinion on damages. They contend that although Stoldt may offer testimony from his personal knowledge as an employee of Reichhold's contractors as a fact witness, Stoldt cannot testify as a damage expert. Defendants

⁶Additionally, Plaintiff does not address this challenge in its brief.

claim that Reichhold's motive for offering Stoldt as an expert on damages is "to avoid the task of attempting to prove its damages through fact testimony by dressing up its arguments as 'expert opinions.'" (Defs.' Br. 28). Defendants contend that although Stoldt does not explain how he arrived at this assessment of costs, it appears that: (1) he reviewed the invoices of O'Brien & Gere and CH2M HILL pertaining to all the work relating to the environmental conditions of the Site; (2) he then assigned all or some of the costs to USMR using an arbitrary percentage. (*Id.*). Defendants point to an excerpt from Stoldt's deposition testimony, where he was asked and answered as follows:

- Q What method did you use to separate metals from nonmetals on invoices containing both metals and nonmetals costs?
- A I looked at the period that the invoice covered, and if there was nothing on the invoice cover that described what was done for that period of time, I went back into my files to understand what was done. And then I applied a percentage to metals.
- Q So in some cases the invoices themselves didn't make clear what portion was attributable to metals or nonmetals, so you had to go look at other information?
- A Correct. Which could have been a comment letter from the New Jersey Department of Environmental Protection where there may have been, you know, half comments for metals, half comments for chlorinateds, so it would be a 50 percent allocation in that case. That we were responding to.

(Stoldt Dep. 106-07). Defendants argue that this is not a reliable methodology for allocating costs, but instead is "arbitrary speculation." (Defs. Br. 29). They contend that because Stoldt did not break down the incurred costs to specific tasks attributable to USMR, the opinion is unhelpful to the finder of fact. (*Id.*). They argue that if a finder of fact concluded that some tasks were attributable to USMR and some were not, the percentage allocations would be of no value.

(Id.). Finally, Defendants argue that if Reichhold seeks to argue that 25%, 50%, 75% or 100% of a particular invoice should be allocated to a particular task, and that task should be attributed to USMR, then Reichhold should be required to present fact evidence and argument as to why its proposed allocation is appropriate. (Id.).

Plaintiff explains that “[b]ecause Reichhold contends that all of the metals contamination on the Site is USMRC’s responsibility, Reichhold is seeking 100% of the metals-related costs reflected on OBG’s invoices.” (Pl.’s Br. 40). Plaintiff argues that because on some of the invoices O’Brien & Gere was not able to completely separate out metals and nonmetals work, Defendants’ criticism of Stoldt’s methodology for allocating costs is limited only to those invoices in which the invoices themselves do not make clear on their face what portion was attributable to metals or nonmetals. (Id.).

Plaintiff contends that the metals and nonmetals invoices were not allocated as such solely for the purpose of litigation, but were submitted to Reichhold for payment. (Id.). Plaintiff claims that “[s]ince the mid-1990’s, when it became apparent that USMRC would assume no further responsibility for its disposal of slag on the Site, Reichhold’s contractors were directed by Reichhold to break out separately the metals and non-metals related work.” (Id.). Plaintiff argues that it is not required to retain an expert accountant to testify to the allocation of costs, and that an accountant cannot differentiate between metals-related costs and nonmetals-related costs. Finally, Plaintiff argues that Defendants’ claim that it has no method for auditing Reichhold’s invoices has no merit because Reichhold produced over 50,000 pages of documents to support the work described in the invoices. (Id. at 41). Plaintiff maintains that “[i]f Stoldt’s invoices were a product of speculation of [sic] guesswork, as alleged by defendants, it is hardly

to be expected the plaintiff would have continued paying those invoices over the past 12 years.”
(Id.).

From the testimony and arguments of the parties, it appears that Stoldt’s methodology was as follows: (1) he reviewed the invoices, separating them into metals-related work and nonmetals-related work – the metals-related work would be 100% attributable to USMR; and (2) if there were invoices that did not make clear whether they were for metals or nonmetals- related work, Stoldt would look at other files relating to the work, determine what percentage of the work was metals-related, and attribute that percentage to USMR.

Under Fed. R. Evid. 702, this methodology is unreliable. While the parties agree that Stoldt may testify as a fact witness based on his experience as an employee of Reichhold’s contractors, Plaintiff has not established that Stoldt’s methodology of reviewing billing invoices and allocating costs based on that review is reliable. Importantly, there is no way that Stoldt’s review and allocation determination could be audited to see whether those calculations are accurate. Therefore, Stoldt’s expert opinion on damages will be excluded.

G. The Expert Report of Kelly Stynes

_____ Kelly H. Stynes (“Stynes”) states in her expert report (the “Stynes Report”) that she has a Bachelor of Science Degree in Chemical Engineering from Bucknell University. (Stynes Report 3). She worked at the Site for Reichhold as a project manager for approximately two years from 1996 to 1998 and was responsible for project management, reviewing and commenting on draft reports, and managing OBG and most project decisions. (Id.). Her opinions relate to Reichhold’s work in complying with the ECRA/ISRA regulations, the historical operations at the

Site and the neighboring properties, and the Northwest and Northeast fields on the Staflex Parcel and the reports that address those areas. (*Id.* at 1). Her opinions are based on all of the documents prepared as part of the ECRA compliance, and documents produced by USMR, including aerial photographs, drawings, reports, and memos. (*Id.* at 3).

Stynes's undergraduate degree in chemical engineering and her two years experience working at the Site for Reichhold as a project manager do not qualify her as an expert in interpreting ECRA compliance documents so as to give the opinion she sets forth in her report. She will be excluded as an expert. Her proposed testimony is largely duplicative of the opinions of others with much greater experience and expertise. To the extent that her testimony concerns factual matters at the Site, she can be added as a fact witness.

H. The Expert Report of Richard P. Cawley

____ Richard P. Cawley ("Cawley") is Vice President of O'Brien & Gere and has the following professional registrations: Certified Professional Geologist (AIPG); Professional Geologist (IN, AK, PA, WY, TN); New Jersey Certified Subsurface Evaluator; and New Jersey Cleanup Star. (Cawley Corporate Resume at p.1 attached to Cawley Report). His areas of expertise include geologic and hydrogeologic research and investigation, site assessments, investigation and remediation of industrial facilities and hazardous waste sites, underground storage tank programs, and industrial Facility decommissioning and demolition. (*Id.*).

The opinions in his report (the "Cawley Report") relate to, *inter alia*: (1) the ECRA process in general; (2) NJDEP regulations promulgated pursuant to ECRA, ISRA and Reichhold's compliance with these regulations; and (3) Reichhold's investigatory and remedial

actions pursuant to ECRA/ISRA. (Cawley Report 1). In developing his report, he relied upon the documents referenced in the report, his past experience and training, and documents O'Brien & Gere generated during the years it worked at the Site. (Id.).

Defendants seek to preclude the following opinion in the Cawley Report:

During my involvement, the perception of O'Brien & Gere, Reichhold, and the NJDEP was that the metals contamination onsite were predominantly the result of the deposition of slag from US Metals rather than other forms of emissions. It was not until later that it was fully understood that there were other sources of metals contamination.

(Cawley Report 7). Defendants argue that although he can testify as a fact witness as to his own understanding at that time, he should not be entitled to offer an expert opinion as to his own perception or the perception of others, including the perceptions of NJDEP personnel. (Defs.' Br. 31-32).

Plaintiff argues that "[t]o the extent that Mr. Cawley's opinion concerning NJDEP's understanding of the source of the slag on the Site is based upon his conversations with NJDEP personnel and/or review of NJDEP correspondence, there is nothing objectionable about his offering his opinion concerning the evolution of NJDEP's thinking over time." (Pl.'s Br. 43). Plaintiff contends that "Reichhold's understanding of what was required of it by NJDEP addresses defendants' assertion that Reichhold knew or should have known as of 1994 that Reichhold's obligations were broader than what was reflected in the June 1991 Cleanup Plan." Plaintiff asserts that Cawley's opinion as to both the understanding of the NJDEP and Reichhold are based on his "painstaking analysis of NJDEP official correspondence" and detailed correspondence between Reichhold and O'Brien & Gere. (Pl.'s Br. 43-44).

The portion of the Cawley Report that is in dispute reflects Cawley's opinion, at the time he was involved with the Site, about the perception of O'Brien & Gere, Reichhold, and the NJDEP as to the source of the metals contamination on the Site. This so-called opinion is in reality Cawley's statement as to a factual matter, namely, the understandings upon which O'Brien & Gere, Reichhold and NJDEP were acting. The understanding of these three parties, determined from their words and actions, are an inherent part of the clean-up actions that they took. The clean-up actions, which are the subject of Cawley's report, would not be comprehensible without having knowledge of these understandings. Although phrased as an opinion, it will be admitted as part of the factual background of Cawley's report.

I. Legal Opinions on the Meaning of "New Environmental Obligation"

Defendants also seek to preclude the following three opinions concerning the meaning of "New Environmental Obligation" as defined in the 1994 Settlement Agreement:

All of the costs discussed in the preceding paragraphs are recoverable because they represent a "New Environmental Obligation" as defined in items 1(c) and 3(a) of the 1994 Settlement Agreement, per the following:

- a. Not Related to BTL Slag as defined by Exhibit A of the 1994 Settlement Agreement;
- b. The passage of new regulations pursuant to ISRA and adoption of other significant new regulation (ISRA Regulations (N.J.A.C. 7:26B)); and,
- c. Amendment to cleanup plan through NJDEP comment letters including, but not limited to, letters dated February 22, 1995, May 8, 1995, September 8, 1995, and December 22, 1995. (Stoldt Report 3).

[S]lag identified in the Northwest and Northeast Fields of the Ester Plant represents a New Environmental Obligation as defined in the

1994 Settlement Agreement. (Stynes Report 2).⁷

After receipt of the NJDEP's December 29, 1994 letter regarding the Staflex inspection which identified slag material in the Northwest and Northeast fields and receipt of correspondence directing Reichhold to delineate to the "residential" criteria, Reichhold initiated a revised soil investigation and delineation program. This approach was based upon the NJDEP now requiring Reichhold to delineate contaminants to the "residential" criteria analytically. These requirements constitute New Environmental Obligations under the terms of the 1994 Settlement Agreement. (Cawley Report 7).

Defendants contend that these opinions should be precluded because the witnesses "may not offer 'expert testimony' on the ultimate legal effect of the parties' Settlement Agreement and Release." (Defs.' Br. 30). They argue that this is a question of law for the court. (Id.).

Plaintiff argues that the opinions at issue are not legal opinions and that these experts will offer opinions concerning the scope of environmental work at the Site and how that scope of worked evolved over time. (Pl.'s Br. 52). Plaintiff contends that these opinions "will provide crucial technical and factual context for the Court's interpretation of the parties obligations under the 1994 Settlement Agreement, as well as Reichhold's obligations under the June 1991 Cleanup Plan." (Id.). Plaintiff also argues that because this case is being tried as a bench trial, there is little chance that the testimony could cause confusion. (Id. at 54).

These opinions represent a mixture of fact and law. The ultimate legal conclusions must be made by the court, but it would be helpful for the court in reaching that conclusion to have the opinion of an expert in the field as to how the highly technical statutes and regulations and their

⁷As Stynes has been excluded as an expert, she will not be permitted to give her opinion in this regard.

impact align themselves with the language of the 1994 Settlement Agreement. Just as Rhodes will be permitted to give his overall opinion, Stoldt and Cawley will be permitted to give their opinions whether specific statutory and regulatory changes are new obligations within the meaning of the 1994 Settlement Agreement.

IV. CONCLUSION

The court will enter an order implementing this opinion.

/s/ Dickinson R. Debevoise
DICKINSON R. DEBEVOISE, U.S.S.D.J.

Dated: February 22, 2007